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Attorney Docket No. 101.0044-04000
Customer No. 22882

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Gary Karlin Michelson)
Serial No.: 09/605,001)
Filed: June 27, 2000)
For: APPARATUS AND METHOD OF)
INSERTING SPINAL IMPLANTS)

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Sir:

REPLY TO NOTICE OF NON-COMPLIANT AMENDMENT

In reply to the Notice of Non-Compliant Amendment of September 12, 2008, Applicant submits herewith the corrected documents in compliance with 37 C.F.R. §§ 1.121 and/or 1.4. Please replace the Claim Chart Under 37 C.F.R. § 41.202(a)(3) and Claim Chart Under 37 C.F.R. §§ 41.202(a)(5) and (6) attached to Applicant's Reply to Office Action filed May 27, 2008 with the corrected claim charts submitted herewith.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-3726.

Respectfully submitted,
MARTIN & FERRARO, LLP

Dated: September 16, 2008By: 

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PATENT
Attorney Docket No. 101.0044-04000
Customer No. 22882

CLAIM CHART UNDER 37 C.F.R. § 41.202(a)(3)

Claim Count Number	Claims of Application No. 09/605,001	Claims of U.S. Patent No. 6,0836,225
1	<p>105. A method for performing a surgical procedure, comprising the steps of:</p> <p>providing a surgical retractor including an elongate member defining a longitudinal axis, the elongate member including proximal and distal end portions and defining an opening therethrough to receive instrumentation, the distal end portion configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae and having two spaced apart retractor arms, each retractor arm including first and second supporting surfaces laterally displaced with respect to each other and to the longitudinal axis;</p> <p>distracting the adjacent vertebrae by at least partially inserting the retractor arms of the retractor within the intervertebral space whereby the first supporting surface of each retractor arm engages one vertebrae and the second supporting surface of</p>	<p>1. A method for performing a surgical procedure, comprising the steps of:</p> <p>providing a surgical retractor including an elongate member defining a longitudinal axis, the elongate member including proximal and distal end portions and defining an opening therethrough to receive instrumentation, the distal end portion configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae and having two spaced apart retractor arms, each retractor arm including first and second supporting surfaces laterally displaced with respect to each other and to the longitudinal axis;</p> <p>distracting the adjacent vertebrae by at least partially inserting the retractor arms of the retractor within the intervertebral space whereby the first supporting surface of each retractor arm engages one vertebrae and the second supporting surface of each retractor arm engages the</p>

	each retractor arm engages the other vertebrae such that the adjacent opposed vertebrae are laterally displaced; and performing the surgical procedure.	other vertebrae such that the adjacent opposed vertebrae are laterally displaced; and performing the surgical spinal procedure.
2	106. The method according to claim 105 wherein the step of performing includes introducing surgical instrumentation within the opening of the surgical retractor, the surgical instrumentation being utilized to perform the surgical procedure.	2. The method according to claim 1 wherein the step of performing includes introducing surgical instrumentation within the opening of the surgical retractor, the surgical instrumentation being utilized to perform the surgical procedure.
3	107. The method according to claim 106 wherein the step of performing the surgical procedure includes introducing a fusion implant through the opening in the surgical retractor and between the distracted vertebrae to effect fusion thereof.	3. The method according to claim 2 wherein the step of performing the surgical procedure includes introducing a fusion implant through the opening in the surgical retractor and between the distracted vertebrae to effect fusion thereof.
4	108. A method for fusing adjacent vertebral bodies, comprising the steps of: a) accessing the intervertebral disc space; b) providing a retractor including a retractor sleeve having proximal and distal end portions, the distal end portion having opposed retractor arms extending in a general longitudinal direction;	5. A method for fusing adjacent vertebral bodies, comprising the steps of: a) accessing the intervertebral disc space; b) providing a retractor including a retractor sleeve having proximal and distal end portions, the distal end portion having opposed retractor arms extending in a general longitudinal direction;

	<p>c) positioning the retractor arms within the intervertebral disc space whereby first and second supporting surfaces of each arm contact opposed vertebral bodies;</p> <p>d) introducing a drill instrument into</p>	<p>c) positioning the retractor arms within the intervertebral disc space whereby first and second supporting surfaces of each arm contact opposed vertebral bodies;</p> <p>d) introducing a drill instrument into</p>
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	<p>c) positioning the retractor arms within the intervertebral disc space whereby first and second supporting surfaces of each arm contact opposed vertebral bodies;</p> <p>d) introducing a drill instrument into the sleeve and advancing the drill instrument within the sleeve to the disc space;</p> <p>e) forming with the drill instrument a bore that penetrates at least partially into each opposed vertebral body;</p> <p>f) removing the drill instrument from the sleeve; and</p> <p>g) introducing a fusion implant into the bore.</p>	<p>c) positioning the retractor arms within the intervertebral disc space whereby first and second supporting surfaces of each arm contact opposed vertebral bodies;</p> <p>d) introducing a drill instrument into the sleeve and advancing the drill instrument within the sleeve to the disc space;</p> <p>e) forming with the drill instrument a bore that penetrates at least partially into each opposed vertebral body;</p> <p>f) removing the drill instrument from the sleeve; and</p> <p>g) introducing a fusion implant into the bore.</p>
5	<p>109. The method according to claim 108 further including the steps of:</p> <p>h) introducing a tap instrument into the sleeve and advancing the tap instrument within the sleeve to the disc space;</p> <p>i) tapping with the tap instrument a thread within the bore;</p> <p>j) removing the tap from the retractor sleeve;</p> <p>k) introducing into the sleeve a fusion cage having a cage body with an external thread; and</p> <p>l) screwing the cage body into the threaded bore.</p>	<p>6. The method according to claim 5 further including the steps of:</p> <p>h) introducing a tap instrument into the sleeve and advancing the tap instrument within the sleeve to the disc space;</p> <p>i) tapping with the tap instrument a thread within the bore;</p> <p>j) removing the tap from the retractor sleeve;</p> <p>k) introducing into the sleeve a fusion cage having a cage body with an external thread; and</p> <p>l) screwing the cage body into the threaded bore.</p>

6	110. The method according to claim 109 wherein the step of introducing a fusion implant includes introducing a fusion implant having a plurality of openings extending through the cage body.	7. The method according to claim 6 wherein the step of introducing a fusion implant includes introducing a fusion implant having a plurality of openings extending through the cage body.
7	111. The method according to claim 110 further including the step of filling the cage body with bone-growth inducing substances.	8. The method according to claim 7 further including the step of filling the cage body with bone-growth inducing substances.
8	112. The method according to claim 111 further including the step of mounting an end cap to the open end of the cage body to enclose the bone-growth inducing substances within the cage body.	9. The method according to claim 8 further including the step of mounting an end cap to the open end of the cage body to enclose the bone-growth inducing substances within the cage body.
9	113. The method according to claim 108 wherein the retractor arms define a dimension between the first and second supporting surfaces sufficient to distract the opposed vertebral bodies and wherein the step of positioning the retractor arms includes distracting the opposed vertebral bodies.	10. The method according to claim 5 wherein the retractor arms define a dimension between the first and second supporting surfaces sufficient to distract the opposed vertebral bodies and wherein the step of positioning the retractor arms includes distracting the opposed vertebral bodies.
10	114. A surgical retractor instrument comprising an elongated sleeve member including proximal and distal end portions and defining a longitudinal axis, the elongated sleeve member defining a	11. A surgical retractor instrument comprising an elongated sleeve member including proximal and distal end portions and defining a longitudinal axis, the elongated sleeve member defining a

	longitudinal passageway for reception of surgical instrumentation, the distal end portion having first and second retractor arms extending in a general longitudinal direction, each retractor arm having first and second opposed supporting surfaces for engaging respective opposed adjacent tissue portions, each retractor arm defining a dimension between the first and second supporting surfaces sufficient to distract the opposed tissue portions upon insertion thereof; and a cap engageable with the proximal end portion of the sleeve member, the cap for receiving the impact of a driving instrument used to engage the retractor instrument with the tissue portions.	longitudinal passageway for reception of surgical instrumentation, the distal end portion having first and second retractor arms extending in a general longitudinal direction, each retractor arm having first and second opposed supporting surfaces for engaging respective opposed adjacent tissue portions, each retractor arm defining a dimension between the first and second supporting surfaces sufficient to distract the opposed tissue portions upon insertion thereof; and a cap engageable with the proximal end portion of the sleeve member, the cap for receiving the impact of a driving instrument used to engage the retractor instrument with the tissue portions.
11	115. The surgical retractor according to claim 114 wherein the first and second supporting surfaces of each retractor arm are substantially planar.	12. The surgical retractor according to claim 11 wherein the first and second supporting surfaces of each retractor arm are substantially planar.
12	116. The surgical retractor according to claim 114 wherein each retractor arm has a tapered end portion for facilitating insertion into the tissue portions.	13. The surgical retractor according to claim 11 wherein each retractor arm has a tapered end portion for facilitating insertion into the tissue portions.

13	<p>117. A surgical retractor for use in distracting adjacent vertebrae having an intervertebral space defined therebetween, the retractor comprising:</p> <p>an elongate sleeve body having a proximal end and a distal end and the sleeve body having an opening in a side wall portion thereof defining a longitudinal passageway therebetween; and</p> <p>first and second retractor arms extending longitudinally from the distal end of the elongate sleeve body, each retractor arm defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distraction distance at least equal to the height of the intervertebral space defined between the adjacent vertebrae.</p>	<p>14. A surgical retractor for use in distracting adjacent vertebrae having an intervertebral space defined therebetween, the retractor comprising:</p> <p>an elongate sleeve body having a proximal end and a distal end and the sleeve body having an opening in a side wall portion thereof defining a longitudinal passageway therebetween; and</p> <p>first and second retractor arms extending longitudinally from the distal end of the elongate sleeve body, each retractor arm defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distraction distance at least equal to the height of the intervertebral space defined between the adjacent vertebrae.</p>
14	<p>118. The surgical retractor according to claim 117 wherein the retractor arms each possess distal tapered portions for facilitating insertion into the intervertebral space.</p>	<p>15. The surgical retractor according to claim 14 wherein the retractor arms each possess distal tapered portions for facilitating insertion into the intervertebral space.</p>

15	119. The surgical retractor according to claim 117 wherein the first and second supporting surfaces of each retractor arm are in general parallel relation.	16. The surgical retractor according to claim 14 wherein the first and second supporting surfaces of each retractor arm are in general parallel relation.
16	120. A surgical retractor for use in distracting adjacent vertebrae, comprising: an elongate body having a proximal end and a distal end and defining a longitudinal passageway therebetween, the elongate body defining a longitudinal axis; first and second retractor arms extending longitudinally from the distal end of the elongate body, each retractor arm defining a first vertebra supporting surface and a second vertebra supporting surface, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distance sufficient to contact the adjacent vertebrae to be in supporting engagement therewith, the first and second vertebra support surfaces being in general parallel relation with each other and to the longitudinal axis of the elongate body, and an impactor member mounted adjacent the proximal end of the elongate	17. A surgical retractor for use in distracting adjacent vertebrae, comprising: an elongate body having a proximal end and a distal end and defining a longitudinal passageway therebetween, the elongate body defining a longitudinal axis; first and second retractor arms extending longitudinally from the distal end of the elongate body, each retractor arm defining a first vertebra supporting surface and a second vertebra supporting surface, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distance sufficient to contact the adjacent vertebrae to be in supporting engagement therewith, the first and second vertebra support surfaces being in general parallel relation with each other and to the longitudinal axis of the elongate body, and an impactor member mounted adjacent the proximal end of the elongate

	body and being dimensioned to receive the impact of the driving member utilized to position the first and second retractor arms with respect to the adjacent vertebrae.	body and being dimensioned to receive the impact of the driving member utilized to position the first and second retractor arms with respect to the adjacent vertebrae.
17	121. A surgical retractor for use in distracting adjacent vertebrae, the retractor comprising: an elongate sleeve body having a proximal end and a distal end and defining a longitudinal passageway therebetween, the elongate sleeve body including at least one longitudinal opening in an intermediate wall portion; and first and second retractor arms extending longitudinally from the distal end of the elongate sleeve body, each retractor arm defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced thereon at a predetermined distraction distance.	18. A surgical retractor for use in distracting adjacent vertebrae, the retractor comprising: an elongate sleeve body having a proximal end and a distal end and defining a longitudinal passageway therebetween, the elongate sleeve body including at least one longitudinal opening in an intermediate wall portion; and first and second retractor arms extending longitudinally from the distal end of the elongate sleeve body, each retractor arm defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced thereon at a predetermined distraction distance.
18	122. A method for performing a surgical procedure comprising: providing a surgical retractor including an elongate sleeve member	19. A method for performing a surgical procedure comprising: providing a surgical retractor including an elongate sleeve

	<p>having proximal and distal end portions and defining an opening therethrough to receive instrumentation, the distal end portion configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae;</p> <p>distracting the adjacent vertebrae by at least partially inserting the distal end portion of the sleeve member within the intervertebral space;</p> <p>inserting instrumentation through the opening in the surgical retractor; and</p> <p>performing the surgical procedure.</p>	<p>member having proximal and distal end portions and defining an opening therethrough to receive instrumentation, the distal end portion configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae;</p> <p>distracting the adjacent vertebrae by at least partially inserting the distal end portion of the sleeve member within the intervertebral space;</p> <p>inserting instrumentation through the opening in the surgical retractor; and</p> <p>performing the surgical spinal procedure.</p>
19	<p>123. The method according to claim 122 wherein the step of performing the surgical spinal procedure includes utilizing the instrumentation inserted through the opening in the surgical retractor to perform the surgical spinal procedure.</p>	<p>20. The method according to claim 19 wherein the step of performing the surgical spinal procedure includes utilizing the instrumentation inserted through the opening in the surgical retractor to perform the surgical spinal procedure.</p>
20	<p>124. The method according to claim 123 wherein the elongate sleeve member of the surgical retractor defines an axial opening and wherein the step of inserting includes positioning instrumentation through the axial opening to perform the surgical spinal procedure.</p>	<p>21. The method according to claim 20 wherein the elongate sleeve member of the surgical retractor defines an axial opening and wherein the step of inserting includes positioning instrumentation through the axial opening to perform the surgical spinal procedure.</p>

21	125. A method for performing a surgical procedure comprising: providing a surgical retractor including an elongate hollow member having proximal and distal end portions, the distal end portion having first and second stationary retractor arms configured for insertion at least partially into an intervertebral space defined between upper and lower opposed vertebrae; distracting the adjacent vertebrae to a predetermined distracted position by at least partially inserting the retractor arms within the intervertebral space; and performing the surgical procedure.	22. A method for performing a surgical procedure comprising: providing a surgical retractor including an elongate hollow member having proximal and distal end portions, the distal end portion having first and second stationary retractor arms configured for insertion at least partially into an intervertebral space defined between upper and lower opposed vertebrae; distracting the adjacent vertebrae to a predetermined distracted position by at least partially inserting the retractor arms within the intervertebral space; and performing the surgical spinal procedure.
22	126. The method according to claim 125 wherein each retractor arm includes first and second opposed supporting surfaces and wherein the step of distracting includes at least partially inserting the retractor arms whereby the first and second supporting surfaces of each retractor arm respectively engage the upper and lower vertebrae.	23. The method according to claim 22 wherein each retractor arm includes first and second opposed supporting surfaces and wherein the step of distracting includes at least partially inserting the retractor arms whereby the first and second supporting surfaces of each retractor arm respectively engage the upper and lower vertebrae.
23	127. A surgical retractor instrument comprising an elongated sleeve member including proximal and distal	24. A surgical retractor instrument comprising an elongated sleeve member including proximal and

	<p>end portions and defining a longitudinal axis, the elongated sleeve member defining a longitudinal passageway for reception of surgical instrumentation, the distal end portion having first and second stationary retractor arms extending in a general longitudinal direction, each retractor arm having opposed distracting surfaces, the distracting surfaces of each retractor arm laterally spaced with respect to the longitudinal axis at a predetermined distraction distance sufficient to distract the opposed tissue portions upon insertion thereof the sleeve member including an opening in an outer wall thereof and proximate the distal end portion of the sleeve member.</p>	<p>distal end portions and defining a longitudinal axis, the elongated sleeve member defining a longitudinal passageway for reception of surgical instrumentation, the distal end portion having first and second stationary retractor arms extending in a general longitudinal direction, each retractor arm having opposed distracting surfaces, the distracting surfaces of each retractor arm laterally spaced with respect to the longitudinal axis at a predetermined distraction distance sufficient to distract the opposed tissue portions upon insertion thereof the sleeve member including an opening in an outer wall thereof and proximate the distal end portion of the sleeve member.</p>
24	<p>128. The surgical retractor according to claim 127 wherein the distraction distance of each retractor arm is greater than the height of the intervertebral space.</p>	<p>25. The surgical retractor according to claim 14 wherein the distraction distance of each retractor arm is greater than the height of the intervertebral space.</p>
25	<p>129. The surgical retractor according to claim 127 wherein the distal end portion is dimensioned for insertion within the intervertebral space defined between adjacent vertebrae and wherein the distraction distance</p>	<p>26. The surgical retractor according to claim 24 wherein the distal end portion is dimensioned for insertion within the intervertebral space defined between adjacent vertebrae and wherein the distraction distance</p>

	defined between the opposed distracting surfaces of each retractor is at least equal to the height of the intervertebral space.	defined between the opposed distracting surfaces of each retractor is at least equal to the height of the intervertebral space.
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CLAIM CHART UNDER 37 C.F.R. §§ 41.202(a)(5) and (6)

Claim Count Number	Claims of Application No. 09/605,001	Description and Location In Disclosure Providing Constructive Reduction to Practice
1	<p>105. A method for performing a surgical procedure, comprising the steps of: providing a surgical retractor including an elongate member defining a longitudinal axis, the elongate member including proximal and distal end portions and defining an opening therethrough to receive instrumentation, the distal end portion configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae and having two spaced apart retractor arms, each retractor arm including first and second supporting surfaces laterally displaced with respect to each other and to the longitudinal axis;</p>	<p>Applicant discloses providing a surgical retractor (extended outer sleeve 700) including an elongate member (hollow tubular member 702) defining a longitudinal axis, the elongate member (hollow tubular member 702) including proximal and distal end portions (distal end 710) and defining an opening therethrough (passage through hollow tubular member 702) to receive instrumentation, the distal end portion (distal end 710) configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae (V) and having two spaced apart retractor arms (extended portions 720 and 722), each retractor arm (extended portions 720 and 722) including first and second supporting surfaces laterally displaced with respect to each other and to the longitudinal axis. (See Specification, page 61, lines 18-23; and Figs. 26 and 27).</p> <div data-bbox="941 1071 1364 1323"> <p>FIG. 26</p> </div> <div data-bbox="974 1365 1315 1701"> <p>FIG. 27</p> </div> <p>"The Extended Outer Sleeve 700 comprises a hollow tubular member 702 having a distal end 710 which has been extended such that a pair of extended portions 720</p>

		and 722, which are essentially a continuation of the hollow tubular member 702 itself (with or without reinforcement), are opposed 180 degrees from each other, tapered at their leading edges 724 and 726 for ease of introduction, and of such height as to restore the height of the intervertebral disc space." (Specification, page 61, lines 18-25).
	distracting the adjacent vertebrae by at least partially inserting the retractor arms of the retractor within the intervertebral space whereby the first supporting surface of each retractor arm engages one vertebrae and the second supporting surface of each retractor arm engages the other vertebrae such that the adjacent opposed vertebrae are laterally displaced; and	Applicant discloses distracting the adjacent vertebrae (V) by at least partially inserting the retractor arms (extended portions 720 and 722) of the retractor (extended outer sleeve 700) within the intervertebral space whereby the first supporting surface of each retractor arm engages one vertebrae and the second supporting surface of each retractor arm engages the other vertebrae such that the adjacent opposed vertebrae (V) are laterally displaced. (See Specification page 61, line 34, to page 62, line 5; and Fig. 27). "The Extended Outer Sleeve 700 by dint of its extended portions 720 and 722 which are inserted between the adjacent vertebrae does itself act as an intervertebral distractor and is therefore essentially a combination outer sleeve and distractor." (Page 61, line 34, to page 62, line 3)
	performing the surgical procedure.	Applicant discloses performing the surgical procedure using the extended outer sleeve (700). (See Specification page 61, lines 14-18; page 62, lines 15-19; and Fig. 27). Furthermore, "referring to FIGS. 26 and 27, an alternative embodiment of the present invention for maintaining distraction during the surgical procedure involves a more specialized form of the previously described Outer Sleeve 140 and is shown and identified as the Extended Outer Sleeve 700." (Specification page 61, lines 14-18).
2	106. The method according to claim 105 wherein the step of performing includes introducing surgical instrumentation within	Applicant discloses inserting surgical instruments within the opening (passage through hollow tubular member 702) of the surgical retractor (extended outer sleeve 700)

3	the opening of the surgical retractor, the surgical instrumentation being utilized to perform the surgical procedure.	to drill, ream, or cut out the bone. (See Specification page 28, lines 28-33).
	107. The method according to claim 106 wherein the step of performing the surgical procedure includes introducing a fusion implant through the opening in the surgical retractor and between the distracted vertebrae to effect fusion thereof.	Applicant discloses introducing a fusion implant through the outer sleeve and between the distracted vertebrae to effect fusion thereof. (See Specification page 29, lines 5 and 6; and page 29, lines 25 and 26).
4	108. A method for fusing adjacent vertebral bodies, comprising the steps of: a) accessing the intervertebral disc space;	Applicant discloses accessing the intervertebral disc space. (See Specification page 26, lines 9 and 10, and lines 31-33).
	b) providing a retractor including a retractor sleeve having proximal and distal end portions, the distal end portion having opposed retractor arms extending in a general longitudinal direction;	Applicant discloses providing a surgical retractor (extended outer sleeve 700) including a retractor sleeve (hollow tubular member 702) having proximal and distal end portions, the distal end portion having opposed retractor arms (extended portions 720 and 722) extending in a general longitudinal direction. (See Specification, page 61, lines 18-23; and Figs. 26 and 27).
	c) positioning the retractor arms within the intervertebral disc space whereby first and second supporting surfaces of each arm contact opposed vertebral bodies;	Applicant discloses positioning the retractor arms (extended portions 720 and 722) within the intervertebral space whereby first supporting surface of each arm contact opposed vertebral bodies. (See Specification page 61, line 34, to page 62, line 5; and Fig. 27).
	d) introducing a drill instrument into the sleeve and advancing the drill instrument within the sleeve to the disc space;	Applicant discloses introducing a drill instrument into the sleeve (hollow tubular member 702) and advancing the drill instrument within the sleeve (hollow tubular member 702) to the disc space. (See Specification page 28, lines 28-33).
	e) forming with the drill instrument a bore that penetrates at least partially into each opposed vertebral body	Applicant discloses forming with the drill instrument a bore that penetrates at least partially into each opposed vertebral body. (See Specification page 28, lines 30-33).
	f) removing the drill instrument from the sleeve; and	Applicant discloses removing the drill instrument from the sleeve. (See Specification page 28, line 33, to page 29, line 1).
	g) introducing a fusion implant into the bore.	Applicant discloses introducing a fusion implant into the bore. (See Specification page 29, lines 25 and 26).

5	109. The method according to claim 108 further including the steps of: h) introducing a tap instrument into the sleeve and advancing the tap instrument within the sleeve to the disc space;	Applicant discloses introducing a tap instrument into the sleeve and advancing the tap instrument within the sleeve to the disc space. (See Specification page 29, lines 2-4).
	i) tapping with the tap instrument a thread within the bore;	Applicant discloses tapping with the tap instrument a thread within the bore. (See Specification page 29, lines 2-4).
	j) removing the tap from the retractor sleeve;	Applicant discloses removing the tap from the retractor sleeve. (See Specification page 29, lines 2-4).
	k) introducing into the sleeve a fusion cage having a cage body with an external thread; and	Applicant discloses introducing into the sleeve a fusion cage having a cage body with an external thread. (See Specification page 29, lines 25 and 26).
	l) screwing the cage body into the threaded bore.	Applicant discloses screwing the cage body into the threaded bore (See Specification page 29, lines 25 and 26).
6	110. The method according to claim 109 wherein the step of introducing a fusion implant includes introducing a fusion implant having a plurality of openings extending through the cage body.	Applicant discloses introducing a fusion implant (such as implant I) having a plurality of openings extending through the cage body (See Specification page 29, lines 5 and 6; page 60, lines 2-6; and Fig. 16).
7	111. The method according to claim 110 further including the step of filling the cage body with bone-growth inducing substances.	Applicant discloses filling the cage body with bone-growth inducing substances (See Specification page 29, lines 19-24; and page 31, line 35, to page 32, line 2).
8	112. The method according to claim 111 further including the step of mounting an end cap to the open end of the cage body to enclose the bone-growth inducing substances within the cage body.	Applicant discloses mounting an end cap to the open end of the cage body to enclose the bone-growth inducing substances within the cage body. (See Specification page 31, line 35, to page 32, line 2)
9	113. The method according to claim 108 wherein the retractor arms define a dimension between the first and second supporting surfaces sufficient to distract the opposed vertebral bodies and wherein the step of positioning the retractor arms	Applicant discloses that the retractor arms (extended portions 720 and 722) define a dimension between the first and second supporting surfaces sufficient to distract the opposed vertebral bodies (V), where the retractor arms (extended portions 720 and 722) are positioned to distract the opposed vertebral bodies (V). (See

	includes distracting the opposed vertebral bodies.	Specification page 61, line 34, to page 62, line 3; and Fig. 27).
10	114. A surgical retractor instrument comprising an elongated sleeve member including proximal and distal end portions and defining a longitudinal axis, the elongated sleeve member defining a longitudinal passageway for reception of surgical instrumentation, the distal end portion having first and second retractor arms extending in a general longitudinal direction, each retractor arm having first and second opposed supporting surfaces for engaging respective opposed adjacent tissue portions, each retractor arm defining a dimension between the first and second supporting surfaces sufficient to distract the opposed tissue portions upon insertion thereof; and	Applicant discloses a surgical retractor instrument (extended outer sleeve 700) including an elongated sleeve member (hollow tubular member 702) having proximal and distal end portion and defining a longitudinal axis, the elongated sleeve member (hollow tubular member 702) defining a longitudinal passageway (passage through hollow tubular member 702) for reception of surgical instrumentation, the distal end portion having first and second retractor arms (extended portions 720 and 722) extending in a general longitudinal direction, each retractor arm (extended portions 720 and 722) having first and second opposed supporting surfaces for engaging respective opposed tissue portions, each retractor arm (extended portion 720 and 722) defining a dimension between the first and second supporting surfaces sufficient to distract the opposed tissue portions upon insertion thereof. (See Specification page 61, line 23, to page 62, line 3).
	a cap engageable with the proximal end portion of the sleeve member, the cap for receiving the impact of a driving instrument used to engage the retractor instrument with the tissue portions.	The cap (driver cap 160) disclosed by Applicant is mounted adjacent the proximal end (on portion 146) of the sleeve member (hollow tubular member 702), the cap (driver cap 160) for receiving the impact of a driving instrument used to engage the retractor instrument (extended outer sleeve 700) with the tissue portions. (See Specification page 39, line 39, to page 40, line 4).
11	115. The surgical retractor according to claim 114 wherein the first and second supporting surfaces of each retractor arm are substantially planar.	Applicant discloses that the first and second supporting surfaces of each retractor arm (extended portions 720 and 722) are substantially planar. (See Specification Figs. 26 and 27).
12	116. The surgical retractor according to claim 114 wherein each retractor arm has a tapered end portion for facilitating insertion into the tissue portions.	Applicant discloses that each of the retractor arms (extended portions 720 and 722) has a tapered end portion (leading edges 724 and 726) for facilitating insertion into the tissue portions. (See Specification page 61, lines 23-25; and Figs. 26 and 27).
13	117. A surgical retractor for use in distracting adjacent vertebrae having an intervertebral space defined therebetween,	Applicant discloses a surgical retractor (extended outer sleeve 700) including an elongate sleeve body (hollow tubular member 702) having a proximal end and a distal

	the retractor comprising: an elongate sleeve body having a proximal end and a distal end and the sleeve body having an opening in a side wall portion thereof defining a longitudinal passageway therebetween; and	end (distal end 710) and defining the sleeve body (hollow tubular member 702) having an opening in a side wall portion thereof defining a longitudinal passageway (passage through hollow tubular member 702) therethrough. (See Specification page 61, lines 18-23; and Figs. 26 and 27).
	first and second retractor arms extending longitudinally from the distal end of the elongate sleeve body, each retractor arm defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distraction distance at least equal to the height of the intervertebral space defined between the adjacent vertebrae	The surgical retractor (extended outer sleeve 700) disclosed by Applicant includes first and second retractor arms (extended portions 720 and 722), each retractor arm (extended portions 720 and 722) defining a first vertebra supporting surface to contact a vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra support surfaces of each retractor arm (extended portions 720 and 722) being spaced a predetermined distraction distance at least equal to the height of the intervertebral space defined between the adjacent vertebrae (V). (See Specification page 61, lines 18-23; and Figs. 26 and 27).
14	118. The surgical retractor according to claim 117 wherein the retractor arms each possess distal tapered portions for facilitating insertion into the intervertebral space.	Applicant discloses that the retractor arms (extended portions 720 and 722) possess distal tapered portions (leading edges 724 and 726) for facilitating insertion into the intervertebral space. (See Specification page 61, lines 23-25; and Figs. 26 and 27).
15	119. The surgical retractor according to claim 117 wherein the first and second supporting surfaces of each retractor arm are in general parallel relation.	The retractor arms (extended portions 720 and 722) disclosed by Applicant includes first and second supporting surfaces that are in general parallel relation to one another. (See Specification Figs. 26 and 27).
16	120. A surgical retractor for use in distracting adjacent vertebrae, comprising: an elongate body having a proximal end and a distal end and defining a longitudinal passageway therebetween, the elongate body defining a longitudinal axis;	Applicant discloses a surgical retractor (extended outer sleeve 700) including an elongate body (hollow tubular member 702) having a proximal end and a distal end (distal end 710) and defining a longitudinal passageway therebetween (passage through hollow tubular member 702), the elongate body (hollow tubular member 702) defining a longitudinal axis. (See Specification page 61, lines 18-23; and Figs. 26 and 27).
	first and second retractor arms extending longitudinally from the distal end of the elongate body, each retractor arm defining	The surgical retractor (extended outer sleeve 700) disclosed by Applicant includes first and second retractor arms (extended portions 720 and 722) defining a first

	a first vertebra supporting surface and a second vertebra supporting surface, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distance sufficient to contact the adjacent vertebrae to be in supporting engagement therewith, the first and second vertebra support surfaces being in general parallel relation with each other and to the longitudinal axis of the elongate body, and	vertebra supporting surface and a second vertebra support surface, the first and second vertebra supporting surfaces of each retractor arm being spaced a predetermined distance sufficient to contact the adjacent vertebrae to be in supporting engagement therewith, the first and second vertebra support surfaces being in general parallel relation with each other and to the longitudinal axis of the elongate body (hollow tubular member 702). (See Specification page 61, lines 18-23; and Figs. 26 and 27).
	an impactor member mounted adjacent the proximal end of the elongate body and being dimensioned to receive the impact of the driving member utilized to position the first and second retractor arms with respect to the adjacent vertebrae.	Applicant discloses an impactor member (driver cap 160) mounted adjacent the proximal end (on portion 146) of the elongate body (hollow tubular member 702) and being dimensioned to receive the impact of the driving member utilized to position the first and second retractor arms (extended portions 720 and 722) with respect to the adjacent vertebrae (V). (See Specification page 39, line 39, to page 40, line 4).
17	121. A surgical retractor for use in distracting adjacent vertebrae, the retractor comprising: an elongate sleeve body having a proximal end and a distal end and defining a longitudinal passageway therebetween, the elongate sleeve body including at least one longitudinal opening in an intermediate wall portion; and	Applicant discloses a surgical retractor (extended outer sleeve 700) including an elongate sleeve body (hollow tubular member 702) having a proximal end and a distal end (distal end 710) and defining a longitudinal passageway therebetween (passage through hollow tubular member 702), the elongate sleeve body (hollow tubular member 702) including at least one longitudinal opening in an intermediate wall portion (passage through hollow tubular member 702). (See Specification page 61, lines 18-23; and Figs. 26 and 27).
	first and second retractor arms extending longitudinally from the distal end of the elongate sleeve body, each retractor arm defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced thereon at a predetermined distraction distance.	The surgical retractor (extended outer sleeve 700) disclosed by Applicant includes first and second retractor arms (extended portions 720 and 722) extending longitudinally from the distal end (distal end 710) of the elongate sleeve body (hollow tubular member 702), each retractor arm (extended portions 720 and 722) defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced

		thereon at a predetermined distraction distance. (<u>See</u> Specification page 61, lines 18-23; and Figs. 26 and 27).
18	122. A method for performing a surgical procedure comprising: providing a surgical retractor including an elongate sleeve member having proximal and distal end portions and defining an opening therethrough to receive instrumentation, the distal end portion configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae;	Applicant discloses providing a surgical retractor (extended outer sleeve 700) including an elongate sleeve member (hollow tubular member 702) having proximal and distal end portions and defining an opening therethrough (passage through hollow tubular member 702) to receive instrumentation, the distal end portion (including extended portions 720 and 722) configured for insertion at least partially into an intervertebral space between adjacent opposed vertebrae. (<u>See</u> Specification page 61, lines 18-23; and Figs. 26 and 27).
	distracting the adjacent vertebrae by at least partially inserting the distal end portion of the sleeve member within the intervertebral space;	Applicant discloses distracting the adjacent vertebrae (V) by at least partially inserting the distal end portion (including extended portions 720 and 722) of the sleeve member (hollow tubular member 702) within the intervertebral space. (<u>See</u> Specification page 61, line 34, to page 62, line 5; and Fig. 27).
	inserting instrumentation through the opening in the surgical retractor; and	Applicant discloses inserting surgical instruments through the opening (passage through hollow tubular member 702) in the surgical retractor (extended outer sleeve 700). (<u>See</u> Specification page 28, lines 28-33).
	performing the surgical procedure.	Applicant discloses performing the surgical procedure using the extended outer sleeve (700). (<u>See</u> Specification page 61, lines 14-18; page 62, lines 15-19; and Fig. 27).
19	123. The method according to claim 122 wherein the step of performing the surgical spinal procedure includes utilizing the instrumentation inserted through the opening in the surgical retractor to perform the surgical spinal procedure.	Applicant discloses inserting surgical instruments through the opening (passage through hollow tubular member 702) in the surgical retractor (extended outer sleeve 700) to drill, ream, or cut out the bone. (<u>See</u> Specification page 28, lines 28-33).
20	124. The method according to claim 123 wherein the elongate sleeve member of the surgical retractor defines an axial opening and wherein the step of inserting includes positioning instrumentation through the axial opening to perform the surgical spinal procedure.	Applicant discloses that the elongate sleeve member (hollow tubular member 702) of the surgical retractor (extended outer sleeve 700) defines an axial opening (passage through hollow tubular member 702), where instruments are positioned through the axial opening (passage through hollow tubular member 702) to perform the surgical procedure. (<u>See</u> Specification page 28, lines

		28-33; and page 61, lines 14-18; and page 62, lines 15-19).
21	125. A method for performing a surgical procedure comprising: providing a surgical retractor including an elongate hollow member having proximal and distal end portions, the distal end portion having first and second stationary retractor arms configured for insertion at least partially into an intervertebral space defined between upper and lower opposed vertebrae;	Applicant discloses providing a surgical retractor (extended outer sleeve 700) including an elongate hollow member (hollow tubular member 702) having proximal and distal end portions, the distal portion having first and second stationary arms (extended portions 720 and 722) configured for insertion at least partially into an intervertebral space between upper and lower opposed vertebrae. (See Specification page 61, lines 18-23; and Figs. 26 and 27).
	distracting the adjacent vertebrae to a predetermined distracted position by at least partially inserting the retractor arms within the intervertebral space; and	Applicant discloses distracting the adjacent vertebrae (V) to a predetermined distracted position by at least partially inserting the retractor arms (extended portions 720 and 722) of the elongate hollow member (hollow tubular member 702) within the intervertebral space. (See Specification page 61, line 34, to page 62, line 5; and Fig. 27).
	performing the surgical procedure.	Applicant discloses performing the surgical procedure using the extended outer sleeve (700). (See Specification page 61, lines 14-18; page 62, lines 15-19; and Fig. 27).
22	126. The method according to claim 125 wherein each retractor arm includes first and second opposed supporting surfaces and wherein the step of distracting includes at least partially inserting the retractor arms whereby the first and second supporting surfaces of each retractor arm respectively engage the upper and lower vertebrae.	Each of the retractor arms (extended portions 720 and 722) disclosed by Applicant includes first and second opposed supporting surfaces and wherein step of distracting includes at least partially inserting the retractor arms whereby the first and second supporting surfaces of each retractor arm retractor arms (extended portions 720 and 722) extending longitudinally from the distal end (distal end 710) of the elongate sleeve body (hollow tubular member 702), each retractor arm (extended portions 720 and 722) defining a first vertebra supporting surface to contact a first vertebra and a second vertebra supporting surface to contact a second vertebra, the first and second vertebra supporting surfaces of each retractor arm being spaced thereon at a predetermined distraction distance. (See Specification page 61, lines 18-23; and Figs. 26 and 27).

23	<p>127. A surgical retractor instrument comprising an elongated sleeve member including proximal and distal end portions and defining a longitudinal axis, the elongated sleeve member defining a longitudinal passageway for reception of surgical instrumentation, the distal end portion having first and second stationary retractor arms extending in a general longitudinal direction, each retractor arm having opposed distracting surfaces, the distracting surfaces of each retractor arm laterally spaced with respect to the longitudinal axis at a predetermined distraction distance sufficient to distract the opposed tissue portions upon insertion thereof the sleeve member including an opening in an outer wall thereof and proximate the distal end portion of the sleeve member.</p>	<p>Applicant discloses a surgical retractor instrument (extended outer sleeve 700) including an elongated sleeve member (hollow tubular member 702) having proximal and distal end portions and defining a longitudinal axis, the elongated sleeve member (hollow tubular member 702) defining a longitudinal passageway (passage through hollow tubular member 702) for reception of surgical instrumentation, the distal end portion having first and second retractor arms (extended portions 720 and 722) extending in a general longitudinal direction, each retractor arm (extended portions 720 and 722) having opposed distracting surfaces, the distracting surfaces of each retractor arm (extended portions 720 and 722) laterally spaced with respect to the longitudinal axis at a predetermined distraction distance sufficient to distract the opposed tissue portions upon insertion thereof the sleeve member (hollow tubular member 702) including an opening in an outer wall thereof and proximate the distal end portion of the sleeve member (hollow tubular member 702). (See Specification page 61, lines 18-23; and Figs. 26 and 27).</p>
24	<p>128. The surgical retractor according to claim 127 wherein the distraction distance of each retractor arm is greater than the height of the intervertebral space.</p>	<p>Applicant discloses that the distraction distance of each of the retractor arms (extended portions 720 and 722) of the surgical retractor (extended outer sleeve 700) disclosed by Applicant is greater than the height of the intervertebral space. (See Specification page 61, lines 24 and 25).</p> <p>"The Extended Outer Sleeve 700 comprises a hollow tubular member 702 having a distal end which has been extended such that a pair of extended portions 720 and 722, which are essentially a continuation of the hollow tubular member 702 itself, are...of such height as to restore the height of the intervertebral disc space." (Specification page 61, lines 18-25).</p>
25	<p>129. The surgical retractor according to claim 127 wherein the distal end portion is dimensioned for insertion within the intervertebral space defined between</p>	<p>Applicant discloses that the distal end portion of the surgical retractor (extended outer sleeve 700) disclosed by Applicant includes retractor arms (extended portions 720 and 722) dimensioned for insertion within the</p>

	adjacent vertebrae and wherein the distraction distance defined between the opposed distracting surfaces of each retractor is at least equal to the height of the intervertebral space.	intervertebral space defined between adjacent vertebrae (V) and wherein the distraction distance defined between the opposed distracting surfaces of each retractor is at least equal to the height of the intervertebral space. (See Specification page 61, lines 24 and 25; and Fig. 27).
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